

INDIAN MEDICAL TEXT IN CENTRAL ASIA

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*Inscribed to the memory of my father
Dr. Syam Ballav Saha L. M. F.
with
love and reverence*

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PREFACE

The present study "Indian Medical Text in Central Asia" is divided into three parts (I) A short synopsis of medical texts in India (II) Bower Manuscript on medicine (III) Fragments of Khotanese medical texts.

Āyurveda is the legitimate heir to the Veda. It has co-ordinated and systematised ancient ideas and it has constituted on immense treasure of observations and experience, both concerning the diseases and means of curing them. The legends of the origins of Āyurveda may take back to the furthest antiquity and attribute the transmission of its teaching to vedic personalities with known names but we cannot follow them therein. They invoke arbitrary and tendentious genealogies whereby obscure families claim descent from illustrious stocks. Āyurveda means the 'knowledge of long life'. Āyurveda is exceedingly important in the history of science. "It is a key concept of Indian medicine and it roughly means rational application. Among other things what it requires is the knowledge of how a number of courses combines to produce an effect. At the same time they feel that something more than mere knowledge of substances is required for their purpose. This something is the intellectual discipline or 'yukti'. Hence they claim 'yukti' or rational application is the ultimate foundation of (therapeutic) success." A physician accomplished in rational application is always Superior to one with the mere empirical knowledge of the substance (Siddhiḥ yuktāu pratisthitā/ tiṣṭhatī uparī yuktijñāh dravyajñānavatām Sadā carakasambhita 1.2.16). Intellectual discipline and rational application constitute Āyurveda.

R. C. Majumdar writes :

"There is a remarkable theory in Āyurveda to the effect that man is an epitome of the universe, a "microcosm" of the macrocosm. Both the universe and man are manifestations of one and

the same eternal spirit ..The concept of the microcosm follows the philosophical doctrines of the Sāṃkhya and Vedānta schools of Indian thought. The theories of cosmic evolution of matter and life and of the common constituents of living and non-living matter are also based on Sāṃkhya and Nyāya-Vaiśeṣika doctrines. The idea of the eternal and omnipotent soul serving a span of existence inside on animated body, as a result of the residual effects of karma (deeds in previous births), is from the Nyāya.. The basic common concepts of Indian philosophy have also been largely incorporated into Āyurveda. Āyurveda accepts that the highest aim of life is the quest for ultimate truth and realisation ; that the perception of our senses is not valid in the absence of spiritual insight ; that suffering is due to the human error of discrimination between the body and mind which suffer and the spirit which is immune ; that the final wisdom is to shed passions and illusions , that the supreme essence of power and awareness is present in man, making him potentially omniscient and omnipotent when he achieves self—realisation ; and that it is possible for the trained mind to achieves self-realisation and salvation ; a healthy body, long-life and keen mind being desirable aids to this end". (Majumdar, Compilation of History of sciences in India, p. 237-38).

The Indian tradition speaks of three major source books of Āyurveda. These are Caraka-Saṃhitā, Suśruta-Saṃhitā and Aṣṭāṅga-Saṃgraha. Besides these we are in possession fragmentary medical works like Bower manuscript and Bheda Saṃhitā. Caraka Saṃhitā is primarily an exposition of Āyurveda, the science of life, defined as the science of the causes and Symptoms of diseases, of their medication and of the maintenance of health. It also deals with the origin of medical science, the fundamental causes of conception and birth and of physical deformities. According to Caraka, life is everlasting and without any beginning, Āyurveda, the science of life, has also been always in existence. The treatise contains a detailed classification and nomenclature of diseases—etiology, diagnosis, prognosis and treatment. Embrology, obstetrics, anatomy, physiology, personal hygiene, training

and duties of physicians and other theoretical and practical aspects of medicine are treated in some detail. There are passages which give valuable indications of the cosmological, biological, physico-chemical, metaphysical, ethical and philosophical ideas prevalent in India at the time.

According to Caraka, Āyurveda has got eight branches (I) Kāyācikitsā, therapeutics (II) Śalākya, the science of the special diseases of the eye, ear, nose, mouth, throat etc. (III) Śalyāpaharṭṛka (IV) Viśagaravairodhikapraśamana toxicology (V) Bhulavyā, psychiatric knowledge (VI) Kaumārabhṛtya, pediatrics (VII) Rasāyana, rejuvenation (VIII) Vājīkacana, knowledge for increasing Virility.

The scope of the treatise is stated to be limited to ten specific topics : (I) Śarīra, anatomy (II) Vṛtti, physiology (III) Hetu, etiology (IV) Vyādhi, pathology (V) Karma, treatment (VI) Kārya, objectives (VII) Kāla, the influence of age and seasons (VIII) Karṭṛ, physicians (IX) Karana, medicines and appliances (X) Vidhivinīścaya procedurs and Sequence.

The Caraka Saṁhita says : “The physician, the drugs, the nursing attendant and the patient constitute the four basic factors of treatment. Possessed of required qualities, they lead to the earliest cure of disease. .of these four the physician occupies the chief place, being at once the knower (of diseases and drugs), instructor (of the attendant and patient) and describer (of medical and regiment) As the utensils, fuel and fire are to a cook in cooking, or as the terrain, army and weapon are to a conqueror in obtaining victory, so are the other three factors in relation to the physician in accomplishing the cure. Hence is the physician the foremost factor in treatment. As the clay, the rod the wheel etc are ineffective in the absence of the potter, so do the other three factors in the absence of the physician fail to accomplish the cure” (Caraka Saṁhitā 1 10 3 & 10-3).

In Susruta Saṁhita the same idea is conveyed to us thus : “The physician, the patient, the medicine and the attendants (nurses) are the four essential factors of a course of medical treatment . In the absence of a qualified physician the three remaining

factor of treatment will prove abortive, like a religious sacrifices performed with the help of an Udgātr, a Hotṛ and Brahman in the absence of Adhvaryū.” (Suśruta Saṁhitā i-34, 15 & 17).

The Suśruta Saṁhitā fully depends on the methodology of science elaborately worked out in the caraka-Saṁhitā, the main point of which is the use of experience and reason ; without them the ancient physicians know no way of understanding the actual cause of a disease or of its cure. The Suśruta Saṁhitā contains only four brief chapters on rasāyana, the discussion of which in the Caraka Saṁhitā is far more extensive.

The second part “Bower manuscript on medicine consists of three parts. The third part which is the largest portion of the collection is called “Navanītaka,” ‘cream’, and contains an abstract of the earlier medical literature. It deals with the preparation of powder, decoctions. The earlier literature quoted in the text includes : Agniveśa, Bheda, Harita, Jātukarṇa, Kṣārapāṇi, Parāśara and Suśruta.

The third part is the khotanese medical text. The khotanese text is not complete. The text contains a series of medical prescriptions with a statement about the various diseases in which each is useful, of the same kind as we find e.g. in the Navanītaka of the Bower manuscript. The text has been characterized as a bilingue and in the beginning there is a regular succession of sanskrit clauses followed by a fairly verbal translation, glossary of the drugs and diseases in Bower manuscript and a vocabulary of khotanese terms is given.

INTRODUCTION

The principle and oldest texts of the Indian medicine are the Saṁhitās, the “corpus” said to be of Bheda, Caraka and Suśruta. The first has reached us in one single and incomplete manuscript. The other two are not available in their original form because they have been revised by recent authors. ‘Āyurveda’ “Science of longevity” sometimes considered as a “secondary part” of the Atharvaveda and sometimes as a “secondary veda” (upaveda) of the Ṛgveda. Āyurveda consists of eight parts (astāṅga) is currently used to denote the science of medicine.

THE LEGENDS ABOUT THE ORIGINS OF THE ĀYURVEDA.

According to Suśruta, medicine was created by the Being who exists by Himself (svayambhu) that is to say Brahman, 100,000 ślokas. In view of the inability of human beings to learn it in this form, Svayambhu is said to have re-composed it in eight parts and taught it to Prajāpati, who is said to have passed it on to the Aśvins, the Asvins to Indra, Indra to Dhanvantari, appearing in the form of Divodāsa, the king of Kāśī. At last Dhanvantari, on the prayer of a group consisting of Aupadhenava, Vaitarana, Ausabha, Pauskatavata, Karavirya, Gopuraraksita and Suśruta taught it to men. Suśruta is, therefore, supposed to have recorded the very words of Dhanvantari himself. Caraka has the same thing to say concerning the origin of medicine and its transmission upto Indra (sutra, 1, 4, 5). Indra is said to have revealed it to Rsi Bharadvāja, who was sent to him by all the well-known ṛṣis desirous of knowing the means of combatting diseases. Bharadvāja is said to have immediately communicated his knowledge to other ṛṣis. One of them Ātreya Punarvasu is said to have subsequently trained six disciples Agniveśa, Bheda, Jātukarna, Parāsara, Harita and Kṣarapāni. Of these Agniveśa is supposed to have been the first to compose a book for teaching.

The Caraka Saṁhitā represents itself to be the manual “composed by Agniveśa and reconstituted by Caraka” (ityagniveśa krte tantre caraka pratisamkrte) and it claims to reproduce the actual words of Ātreya Punarvasu himself.

The legend of the origin of the Āyurveda is inseparable from the legends concerning the origin of many other sciences. It has been an Indian practice to take back the first teaching of sciences and letters to superior gods. The script is supposed to have been invented by Brahman, Astronomy to have been revealed by Sūrya, the grammar of Pāṇini have been elaborated by Śiva.

The sources of the legend concerning the origin of the Āyurveda are more complex. It is evident that the Aśvins because of their reputation as divine doctors play a role in the transmission of the medical science. In the Chhāndogya Upaniṣad (VIII, 15) it is said that the supreme science was given by Brahman to Prajāpati, by Prajāpati to Manu and by Manu to human beings, but a little earlier the same text (VIII, 7-12) has given all the details of the teaching by Prajāpati to Indra.

The oldest ancestor of the master of Āyurveda, Dhanvantari is known as Āyus. In the *Harivamśa* a distinction is made between Divodāsa and Bharadvāja. The relationship between Dhanvantari and Bharadvāja is present and this relationship goes back at least to the Sankhayana-grhyasūtra (11, 14) which unites the two names of Bharadvāja and Dhanvantari just as the Ṛgveda had made a rapprochement between those of Bharadvāja and Divodāsa.

Suśruta which signifies “one who has listened well”, may be studied in relation to the epithet bahuśruta “one who has listened to a lot”, “an extremely learned person”. As the proper name of a person, this word appears only in the classical texts and in Suśruta-Saṁhitā itself. Ātreya denotes “a descendant of Atri” and Atri is a Vedic personage protected by the Aśvins and Indra. He is one of those “Ancients” by whom human beings trace their link with the gods. It is stated in the Ṛgveda (1, 139, 9) “Dadhyañca, Angiras the elder, Priyamedha, Kāṇva Atri, Manu have

known my birth ; these the Ancients and Manu have known it. Their line goes back to the gods and navels in them." The legend of the transmission of the Āyurveda from the gods to human beings could find in the Vedic tradition no more suitable than a personage who was not only the intermediary between the gods and men but also the special ward of medical gods and of the instructor god.

A large number of Buddhist and Jaina legends or Hindu and Jaina ones, attribute the same facts and gestures to their respective heroes. Naturally the two medical schools which inherited a common tradition, had to adopt, each of them, a different way of describing the same thing. Both in the gr̥hyasūtras and in the grammatical tradition, Atri is quite often mentioned along with Bharadvāja and even with the Ātreya. In presenting Bharadvāja and Ātreya as teachers of medicine the caraka-saṁhitā has once again made a reapprochment between these two names.

In any case it is possible that in antiquity a veritable Ātreya was famous as a doctor. In effect several Buddhist texts know of a doctor Ātreya and the sources of these texts appear to be quite independent of the Brahmanic texts and of the caraka-saṁhitā. He is mentioned in the story of Jīvaka, doctor to the King Bimbisāra and to the Buddha, this story not being found in these texts or in this saṁhitā.

It is an old story preserved in the Buddhist texts, it is the same in the texts of both the north and the south. Atreya is described as a renowned doctor of Taksailā (Taxila) in the North-west of India. Jīvaka goes to him to study medicine and it does not take him long to surpass his master. It is true that this renowned doctor is not mentioned in the Pālī sources but in all other sources it is said that he resided at Taksasīla. Jīvaka and Atreya are given to be the contemporaries of Buddha and they could, therefore, have belonged to the end of the fourth and the beginning of the fifth century B C. Evidently it is perfectly possible that a doctor, descendant of Atri, could have won renown at Taxila during this period. But it does not follow that this person could be really the same who is referred to in the caraka

samhita. Hoernle has not hesitated in identifying the two persons, but he has not notified that his identification raised serious difficulties. One can, therefore, believe that one or more Ātreyas traditionally known as eminent doctors have existed. The legends of the origins of the Ayurveda in the two medical saṁhitās do not seem to be based on any historical persons

The personages of suśruta not being historical, Suśruta Saṁhitā, is not as work of a certain suśruta but as the edited manual of a school. The commentator Dalhana (XI-XII century A.D) affirms that Nāgārjuna has been the reconstructor (Prati-saṁskartṛ) of the suśruta saṁhitā. The name Nāgārjuna is that of a Buddhist savant on whose date the traditions do not agree but who is generally made to be the contemporary of the Indo-Scythian King Kaniska and of a Sātavahana king. The Chinese pilgrim Hiuen-Tsang also places Nāgārjuna under a Sātavāhana and describes him as a master in the science of preparing elixirs for long life and as a Buddhist savant. Several texts of alchemy, many therapeutic formulas, the Yogasataka and a texts of black magic, the Kacchaputa are all ascribed to him. It is different to accept the attribution of all these texts to the Buddhist savant. In the suśruta saṁhitā, the teaching of Divodāsa-Dhavantari is said to have been transmitted by his direct pupil, suśruta. In the caraka saṁhitā, on the contrary, the words of Bharadvāja, the substitute of Divodāsa, are not repeated ; it is those of his pupil Ātreya, the opposite number of suśruta, which are quoted by a pupil of the latter, Agniveśa. From this it appears that the work should be called the Agniveśa Saṁhitā rather than Caraka Saṁhitā. Caraka who is not a pupil of Agniveśa but who revised the work wrongly or rightly ascribed to Agniveśa. Certain Buddhist texts in Chinese talk of a certain Tche-lokia or Tche le, i.e., Caraka or Cara who was the doctor of the King Kaniska. This fact has been simultaneously recognised by Sylvain Levi and by Takakusu (A Record of the Buddhist Religion by I-tsing, p. lix).

Caraka Saṁhita is primarily an exposition of Āyurveda, the science of life, defined as the causes and symptoms of diseases, of their medication and the maintenance of the health (Su. 1. 23).

It also deals with the origin of medical science, the fundamental causes of conception and birth and of physical deformities. According to Caraka, life, is everlasting and without any beginning. Ayurveda, the science of life, has also been always in existence (Su. 30. 27). The treatise contains a detailed classification and nomenclature of diseases. According to Caraka, Āyurveda has got eight branches (Su 30. 30).

- (1) Kāyacikitsā, therapeutics.
- (2) Śalakya, the science of the special diseases of the eye, ear, nose, mouth, throat etc.
- (3) Śalyāpaharṭṛka, surgery
- (4) Viśagacavairdhikapraśamana, toxicology.
- (5) Bhūtavidyā, psychiatric knowledge.
- (6) Kaumarabhr̥tya, pediatrics.
- (7) Rasāyana, rejuvenation.
- (8) Vajī Kacana, knowledge for increasing virility.

The scope of the treatise is stated to be limited to ten specific topics (su, 30, 32).

- (I) Sarīra—anatomy
- (II) Vṛtti—physiology
- (III) Hetu—etiology.
- (4) Vyadhi—pathology
- (5) Karma—treatment.
- (6) Kārya—objectives
- (7) Kāla—influence of age and seasons.
- (8) Karṭṛ—physicians.
- (9) Karana—medicines and appliances.
- (10) Vidhiviniścaya—procedure and sequences.

Different types of methods for the treatment of diseases have been described by Caraka, as follows :

- (1) Oral medication by single or compounded medicinal substances ; sometime more than fifty in a prescription are listed. Special emphasis is laid on diet, considered an essential part of the treatment (Su, Chap. 5, 6, 25, 26, 27). Purgation and, or emesis frequently recommended for cleansing the system of accumulated waste materials.

- (2) (a) Eye-drops and valves for eye diseases and loss of visual power (Su. 5, 18 etc.)
- (b) Gargles for diseases of the mouth, throat, teeth and gums (Su. 5, 78, 79 etc.).
- (c) Medicinal cigars and smoking mixtures. for affections of the head, nose, throat and bronchial tract (su. 5, 24 etc.).
- (d) Nasal medication in the form of powders, ointments, fainting fits and affections of the nose (su. 5, 13, 14 etc.). In epilepsy and insanity, herbs and animal substances are burnt for inhalation. These scientific knowledge of Āyurveda had carried to Central Asia from 4th to about the 8th century A.D.

CHAPTER I

HISTORY OF THE MANUSCRIPTS :

The discovery of the Bower manuscripts which is named after its discoverer, Lieutenant Bower, early in the year 1890 in Kucha, where he had gone, on a confidential mission from the Government of India

Kucha, situated about 41042', is one of the four territories or so-called "garrisons" the other three being Kashgar, Khotan and Karashahn, which anciently constituted Eastern Turkestan

On his return to India, Lieutenant Bower took the Manuscript to Simla, whence in September 1890, he forwarded it to colonel J Waterhouse, who was then the President of the Asiatic Society of Bengal By him it was exhibited to the society at their monthly meeting on the 5th November, 1890, when also a short note from Bower, dated the 30th September, 1890 was read explaining the circumstances of the discovery Some attempts were made after the meeting to decipher the manuscript but they proved unsuccessful The first decipherment of the manuscript was first published in April 1891. The whole story of the discovery and decipherment of the Bower manuscript is reviewed in Sir Alfred Croft's Presidential address to the Asiatic Society of Bengal in 1882 and also Sir Charles Elliott's Presidential address in the proceedings for 1894. It was the discovery of the Bower manuscript and its publication in Calcutta which started the whole modern movement of the archeological exploration of Eastern Turkestan. The late Prof Buhler having seen the report of the discovery in the proceedings of the Asiatic Society of Bengal, at once announced it in an early issue of the Vienna Oriental Journal, 1891, (p. 103) The Russian Archeological Society, having thus their attention attracted addressed in November, 1891, request to Mr. Petrovski, the Russian Consul General

in Kashgar to endeavour to collect similar manuscript treasures.

In the meantime the publication of the Bower manuscript steadily pursued its course, The proposal to prepare a complete edition of its text, illustrated with facsimile plates and accompanied by annotated English translation, was accorded in 1892. The first part of the edition appeared in 1893, the second part (in two fascicule) in 1894-5 and the remaining parts III to VI in 1897. Subsequent finds of ancient Central Asian manuscripts, the Sanskrit Index, being a complete Vocabulary of the Bower manuscript was published in 1908 and a revised translation of its medical portions in parts I, II & III in 1909.

CHAPTER II

DESCRIPTION OF THE BOWER MANUSCRIPT :

The term "Bower Manuscript" is not strictly correct. The object in question is not really a single manuscript, but in point of size, rather a combination of two manuscripts, a larger and a smaller. The larger manuscript itself, moreover, in point of subject matter is a complex of six smaller manuscripts. The Bower manuscript, therefore, in reality is a collection of seven distinct manuscript or it may be called a collective manuscript of seven parts. The latter is the terminology adapted in the present edition, that is parts I-III, IV, V and VII constitute the longer manuscript while the smaller manuscript consists of part VI.

The external form of the collective Bower manuscript is that of Indian 'pothi'. A pothi consists of a number of leaves, of a practically uniform oblong shape, generally enclosed between two wooden boards and the whole held in position or "bound" by a string which passes through a hole drilled through the whole pile, unfortunately no photograph was ever taken of the Bower manuscript in the condition in which it was found or in which it was made over by the finder to Bower,

The leaves of the Bower manuscript are cut from the bark of the birch tree; those of a modern Indian pothi are, as a rule of paper.

The Indian Pothī shape of the birch bark Bower manuscript, is a corroborative evidence of the great antiquity of that manuscript. The birch-bark leaves of the Bower manuscript, are of two different sizes. The leaves of parts I-III, IV, V, and VII are considerably large both in length and breadth, than those of part VI. The former measure about $1\frac{1}{2}$ by $2\frac{1}{2}$ inches, the latter, about 9 by 2 inches. Besides the size of the leaves, there is another point which differentiates the two portions of the collective manuscript

from each other. The birch bark of the larger portion is of a quality much inferior to that of the smaller portion. The former is hard and brittle and apt to break if roughly handled, while the latter is soft and tough and can readily be bent.

Moreover, some of the leaves used in the larger portion were in a defective condition at the time when were inscribed, while the leaves of part VI were and are still in perfect order. In Indian pothi the practice is to number, not the pages, but the leaves and the numbers are placed on the left hand margin, either on the obverse or the reverse side of the leaf. In parts IV V, the margins are so imperfectly preserved that it must remain uncertain whether they ever bore any numbers. In parts I-III and VII the margins of most leaves are fairly well preserved.

The total of the existing leaves of the Bower manuscript is fiftyone. But unfortunately the more important portion of it parts I-III, which treats of medicine, is incomplete. Part one (I) ends quite abruptly with fifth folio. Part II also is a fragment, for it ends apparently abruptly, with the 33rd folio. Moreover the two final chapters, the fifteenth and sixteenth are entirely missing. In addition, the entire folios 20, 21 and 30 and the major portion of the folios 16 and 17 are missing. Also smaller portions are missing.

Part III again is a mere fragment. Its commencement is marked, as usual by the sacred symbol of 'om' on the obverse of the first leaf, but it breaks off, not at the bottom but in the middle of that Side of the leaf.

Of parts IV and V, which two are on divination, the former is practically complete, while the later seems to be considerably defective.

Part VI which is a treatise on a charm against snake bite, is complete. Being written on a superior quality of birch bark, it is the best preserved portion of the Bower Manuscript. The left hand margin of all its four folios are in good condition. Part VII which contains a portion of the same charm against snake bite is defective.

Indian manuscripts, as a rule, commence with some benedic-

tory word such siddham, success or Svasti, hail or with sacred practice Om. The last mentioned is almost universally used at the present day. It may be either written in full or indicated by a symbol.

CHAPTER III

SOURCES AND THE DATE OF THE NAVANĪTAKA :

The name and identity of the author of the Navanītaka are not known. The final colophon which perhaps would have supplied that information is, together with the last chapter of the work, unfortunately missing in the manuscript. But from the sources which the author utilised in making his compilation, it is possible to estimate approximately the time when his work is written. So much is certain that the date of writing the work cannot be the same as that of the writing the manuscript in which it has come down to us. The latter is not an autograph. This is proved by a number of clear indications. For example on page 28 in verse 45, we find, in one of the medical formulae, three dots marking the omission of three syllables. At the time of ending the text the emendation 'Trinecha' was suggested but in the meantime the true reading pañcaca has been discovered by Dr. P. Cordier in an ancient medical compendium called "Bheda Saṁhitā", from which "Navanītaka" has quoted the formula in question. Obviously the substitution of the dots shows that the writer of the Bower manuscript had a defective original.

The lower limit for the date of the Navanītaka, which in view may be placed provisionally in the beginning of the fourth century or about 300 A D.

The upper limit is determined by the circumstance that the Charaka-Saṁhitā and Suśruta Saṁhitā are two of the sources from which the author of the Navanītaka quotes copious extracts.

In the opening verse the author advises his readers that in his treatise he is going to bring together the best known formulae of the maharshis or medical authorities of his time, Following the usual practice of Indian writers, he does not name those authorities, assuming of course, that the reader would at once recognise

the standard work from which some particular formula was quoted. The largest number of formulae brought together in Navanītaka belongs to the standard works of the well-known authorities. The most conspicuous among the earliest medical teachers is Punarvasu, the son of Atri, commonly known as Ātreya. According to the Indian tradition he was a physician, teaching medicine in taxila, in the north west of India, about the time of Buddha in the 6th century B C. He is famous as the head of a great medical school of internal medicine. He is said to have had six disciples, who committed their master's teaching to writing in Tantras, larger treatise or Kalpas, smaller monograms. Some centuries later, attempts were made to epitomize these early tantras, Kalpas and gather their substance into saṁhitās or compendia. Only two of these Saṁhitās have come down, these are the *Caraka-Saṁhitā* and the *Bheda-Saṁhitā*. The compendium known as *Caraka-Saṁhitā* which professes to give Ātreya's teaching as reported by his pupil Agnisenā, was compiled by a physician of Kashmir, called *Caraka*. The author or rather compiler of the *Bheda Saṁhitā*, is not known. Both these Saṁhitās or compendium must have been well-known standard books in the time of the author of the Navanītaka for he makes copious extracts from them, without naming them as his sources. From the *Bheda Saṁhitā* the following formulae are taken :

- (1) Ayorajiya-Chūrna ; VV. 48-55 ; in *Bheda Saṁhitā*, VI, 16, VV. 33-450 (fols 131)
- (2) Rasāyanika-ghṛta ; VV. 165b-169a ; in *Bheda Saṁhitā* VI, 4 (fol 100b).
- (3) Daśāṅga-ghṛta ; VV. 201-3, in *Bhedaka Saṁhitā* VI, 5, VV, 17b-20a (fol 105a)
- (4) Madhuyasṭhika-taila VV. 337-43, in *Bhedaka Saṁhitā* VI, 4 (fol 103a mutilated).
- (5-6) Three Āmātisāra-yoga VV. 407-12 ; in *Bhedaka Saṁhitā* VI, 10 (fol 116a).
- (7) Karnasūla-yoga VV. 534b-7a ; in *Bhedaka Saṁhitā* VI, 22 (fol 147-8).

From the Charaka Saṁhitā the following formulae are taken :—

- (1) Talisaka-Chūrna, VV 11-13, in Charaka Saṁhitā, VI, s., VV 140-3
- (2) Shādana-Chūrna, VV. 14-17 ; in Charaka Saṁhitā VI, 8. VV. 136-9.
- (3) Vardhamānaka-chūrna, VV. 25-6 ; in Charaka-Saṁhitā VI, 8. VV. 101-3.
- (4) Tiktaka-ghṛta, VV. 133-6 ; in Charaka Saṁhitā VI, 7. VV. 137-40.
- (5) Mahātiktaka-ghṛta VV 137-43 ; in Charaka Saṁhitā VI. 7, VV. 141-47.
- (7) Shatpata-ghṛta VV. 137-43 ; in Charaka Saṁhitā, VI. 5. VV. 188-200 in Charaka Saṁhitā VI, 1, VV. 59-71.

Besides these formulae, comprised in the foregoing two lists, the Navanītaka contains a considerable number of other formulae, the authors of which are not indicated and the source of which it is, at present impossible to identify. It does not seem improbable, however, that they were extracted by the author of the "Navanītaka" from the tantras or Kalpas of the other four pupils of Atreya. None of their writings have survived to the present day ; but there is evidence which renders it very probable that they still existed at the time when the Navanītaka was compiled.

Whatever the true identity and date of Susruta the younger may be, there can be no doubt that his work belongs to the early Saṁhitā period of the Indian medical literature, that is, the period to which also the Charaka Saṁhitā and the Bheda Saṁhitā belong. Susruta, the younger, not only added his Uttara Tantra, a Sālakya-Tantra, or treatise on Minor Surgery as a complement to the earlier tantra, a Salya tantra or treatise on Minor surgery, of Suśruta the Elder, but he also revised the latter work. Thus the result of his labours, that is the Āyurveda Śāstra of Susruta, is essentially a Saṁhitā work, a compendium of older materials, similar to the charaka saṁhitā and therefore it is rightly known also as the Suśruta Saṁhitā.

CHAPTER IV

THE SCRIPT, THE SCRIBES AND THEIR USAGES IN THE BOWER MANUSCRIPTS :

A glance shows at once that all the seven parts of the Bower manuscripts are written in an essentially identical script. The identity of their script is strikingly shown by the occurrence of the same slight variations in forms of such consonants as K, r and s, and as such vowels as i, o and u. This script is that which prevailed in Northern India from the 4th to the 6th centuries A.D. It is now generally known as the Gupta script, because its prevalence coincided with rule of the (early) Gupta emperors, in whose epigraphic records it is employed. Most of these records inscribed during the period of the Gupta Empires are collected in the third volume of the *Corpus Inscriptionum Indicarum*.

During the period of approximately three centuries of its prevalence the Gupta Script shows two distinct types, a southern and a northern. At Mandasor, Eran and Udaygiri, there exist inscriptions, side by side in both types of the script. From the dates of these inscriptions, it will be seen that, in every case, the records of the southern are earlier than those of the northern type.

For practical purposes the most useful test for distinguishing, the two types is the form of the letter 'M'. Here shows the original form of the letter, in the so-called Aśoka Script. Throughout the whole of the Bower manuscript, the two sibilants appear in the western variety of the northern Gupta type. This fact limits the country of the origin of the manuscript to some part of north western India ; so the probability is that parts I-III were written in the extreme north, and parts V-VII, in the extreme south of that portion of India or rather by scribes coming from those localities.

In parts I-III that character has an upright position, while in

parts V-VII, its position is more or less slanting through a small point in itself, it is worth noticing, because it marks the germ of a fashion of writing with a slant which developed subsequently in the Eastern Turkestan settlement of Kuchar.

The peculiarities of writing show that there must have been no less than four persons engaged in the writing of the Bower Manuscript. In parts I-III, the similarity of writing is, in all points so conspicuous that it is impossible to ascribe their production to more than one person. As to parts V, VI and VII it has been shown from their mode of writing the palatal *ś* that they can not have been written by the identical person who wrote parts I-III. More over, it is practically certain that they must have been written by two different writers.

CONTENTS OF THE MEDICAL TEXTS (PRESCRIPTIONS OF VARIOUS DISEASES)

Ātreya, Harita, Parāśara, Garga, Sambavya, Suśruta, Vasiṣṭha, Karāla and Kāpya, hundreds of times they used to roam about in company of one another enquiring into the forms, power and names of medicinal plants. "Hear from me with an attentive mind, O Suśruta, as I set forth briefly its virtues when applied as an alternative tonic. It cures black leprosy, loss of appetite, tumour, cough, leanness, white leprosy and weak digestion. It removes rheumatism, abdominal pains, consumption, morbid affection of the bowels etc. It cures urinary disorders cold in the head, rheumatism in the arms or back and epilepsy. Venerable Sir, with a voice beautiful like that of a tabor or flute, with a complexion clear as molten fine gold, strong in memory and mind, with a well-knit body, free from all wrinkles etc. With all the senses steady, collected and constantly increasing in vigour, you shall live for a hundred years, with a regulated digestion. Thus for the administration of garlic has been explained, even as it was taught by the sages of old and one should accurately observe it.

Food, digestion, the normal condition of the elements, health plumpness, spirits, energy and long life are all dependent on the digestive faculty. The digestive faculty is set in activity through

food, One should first of all examine the state of the digestive faculty. When the digestion is abnormal or irregular, one should drink the "Dadhika" or Havushādika clarified butter. When the digestion is weak one should fast at first, and afterwards use medicines to promote appetite and assist digestion. Further it may be observed ; when the digestion is weak or too active, a person dies, unless he receives a proper treatment. When it is irregular he contracts all sorts of diseases, when it is regular, he lives long in comfort. Hence a wise physician will at all times in all diseases, first direct his treatment to the proper regulation of the digestive faculty afterwards paying attention to the relief of the sickness.

He who desires a good memory, health and strength and wishes for a long life, should make use of the fresh juice of *Sankhapushī* (conscoorodecussata), *Brāhmī Maṇḍukaparnī* (*Hydrocotyle asiatica*) and liquorice.

Within one month he will obtain a good memory, and within six months he will be able to reproduce from memory. By using it for one year he will live for a thousand years or for two hundred years, if administered in proportions and if he goes on continually repeating the treatment, he will enjoy undecaying life.

In the case of gruels, medicated butter-milk and porridge and antidotes of pills, ointments, suppositories, eye-lotion and in the case of any other medicaments, not named, when the proportion is not mentioned the proportion of the ingredients should be equal, of honey and clarified butter there should be a double portion.

Both Pañchamūla (the fine roots), liquorice, Guduchi (*Tinospora cordifolia*) Rāsnā (*Vanda Roxburghii*), Aśvagandhā, Amoradāru, Pāthā' bark of Cinnamon, the two Bata, Tagara and seeds Sesomum, Mūrvā, Kulattha, Punarnavā, Jivanti, aloe-wood and root of the castor oil plant together with its nuts and sprouts, flower of Kuranda and ginger two or three of these drugs should be boiled in the milk of the goats or cows or sheep mixed with water and then, with the addition of a little rock salt, the mixture may in a rapid state, be applied as a lotion in eye diseases. Pad-

maka, leaf-stalk of the lotus, yellow sandal, buds of flowering grasses, white sandal, Nimba, Patala ; two or three of these may be boiled in the milk of a goat or a woman, and then with the addition of sugar and honey, will make a very good lotion in eye diseases caused by bile and congestion of blood. *Aśvagandhā*, best *Amaradārṇ* also *Katphala*, aloe-wood, *Kantokāri*, *Vrihati*, *Śvadamśtro* two or three of these may be boiled in water and when cooled down to moderate warmth, they may be used mixed with rock-salt and honey, as a lotion in eye diseases caused by Phlegm, so the sages declare, with tamarind trees, rose apple, mango, good-apple with some liquor or with milk or with curdled milk or also with Indian ballberry, blue lotus and the other above mentioned drugs boiled with sour substances and mixed with some rocksalt, a lotion is made for the eyes which will thoroughly cure any eye disease due to congestion of the blood produced by excessive heat or cold.

Having ascertained whether any disease is due to the deficiency or the excess of two humours or all three humours concurrently, an intelligent physician should determine his line of treatment. The tender roots of the castor oil plant with its nuts and sprouts added to the milk of goats make an excellent lotion which cures any eye-disease caused by vitiated air and blood, so good physicians declare.

Prapaundarika, liquorice turmeric, mixed with sugar make a lotion which stops any eye-diseases due to disordered bile *Nata*, *Śvadamśhtra*, Dark of *Vrihati* and *Hrivira*, these boiled in goat milk and water and mixed with rock salt make a lotion which cures any eye-disease due to disordered air and phlegm

Indian ballberry and best liquorice boiled in the milk of a cow or a woman mixed with sugar, may be applied by a good physician as a lotion in any eye disease due to disordered air, blood and bile.

Roots of the cotton plant, *Latā*, *Uśira* yellow sandal and the bark of the fine trees with a milky sap, white Sandal, barley corns these are said to make plasters for the face beneficial to the complexions. These drugs should be dried and then mixed with the

urine of a cow, or with the Sour juice of Jujube and urine or they may be dried and mixed with the juice of citron and with mustard oil and thus applied to the face. Mūrmā, Aśvagandhā, the three myrobalans, Karanja applied as a face plaster, is said to be a remedy against swettings, while a plaster is applied to the face of a patient, he should not laugh or weep nor enjoy sleep, nor should he eat. Nor should he warm himself at a fire, nor retain the plaster after it has become dry. Moles and black-spots moreover skin diseases, pigmentary moles of a person are instantly cured and his sight and complexion cleared through the application of a face plaster

Night blindness, dimness of the eyes, head in the heat, diseases of the eyes caused by deranged bile and accompanied by heat, moreover, any other evils affecting the skin of the face, are instantly relieved through the application of a face plaster. A face plaster should be made of the thickness angula, the leaf stalk of the lotus, candid sugar

Derangement of the chyle, indulgence in sexual intercoruse and vitiation of the bile and blood cause premature grey hair and in the case of old man, it is due to old age.

The constitution of a woman is generally phlegmetice lying enjoying, they discharge the vitiated menstrual blood. Hence thus scalp becomes relieved of the heat of their blood and bile and thus they do not loose their hair and therefore women are not baldheaded. On the contrary, the blood and bile of men becomes vitiated ; hence loosing the roots of the hair, the head becomes bald. Baldness, consisting in the entire loss of hair or in its becoming copper coloured , if it is long established on the head, cannot be removed. But if it is of recent origin it may be remedied and should be carefully attended to.

In the case of baldness or grey hair, one should in the first place have frequent recourse to blood-bettings, the application of emetics also is advantageous for the purification of the vitiated blood , afterwards when the bowels are cleared, suitable food should be taken. Also different preparations of oil and hair colouring may be used and also drugs that cause the production

and growth of hair. Frequent washing of the hair too are beneficial, because they remove disorders of the humours.

A wise physician should administer clarified butter mixed with sweet, sour and saline substances, to a patient suffering from cough caused by rearrangement of the air, either in his food or by itself, according to the state of his vital power.

THE MATUNGA PILLS :

Take asafoetid, the three acrids, Patha (*Stephania hermaphroditi folia*), habush, chebulic, myrobalan, Ajamodo (*carum Roxburghii anum*), Ajagandha (*Seseli indicum*), tamarind, Indian Sorrel, Pomegranate, Pushkara, Coriander, Plumbago-root, Vachā (*Acoru Calamus*), the two carbonatey

THE CHYAVANA PRĀŚA (Clarified butter)

Bil, Agnimantha, (*Premna integrifolia*), Syonāka (*Oroxylum indicum*), Kārshmarya (*Gmelina arborea*), Pātālā (*Stereospermum Suaveolens*), Bata (*Sida Cordifolia*), the four Parni, long pepper, Śvadamshśrā (*Tribulus terrestris*), the two Vṛihatī Śringī (*Rhus succedanea*), Tāmalakī (*Phyllanthus Urinaria*), raisins, Jivanti (*Dendrobium multi caule*), Pushkara, aloe-wood, chebulic myrobalan, Amrita (*Tinospora cordifolia*), Riddhi, Jivaka, Rishabha, Zedoary, Musta (*Cyperus rotundus*), Punarnavā (*Boerhaavia diffusa*), Medo, Cardamoms, Sandal, blue lotus, Vidāri (*Ipomoea digitata*), roots of Vṛisha, Kākoli, Kākanosikā (*Leechirta*) of these drugs take one pala each, add five hundred fruits of emblic myrobalan and boil the whole together in one drona of water, till the infusion is found to be sufficiently evaporated. Now remove the emblic myrobalans from the inspissated juice, stone and fry them in twelve pala of (sweet) oil and clarified butter. Then add fifty pala of well clarified solid molasses (to the inspissated juice and the fried myrobalans), till the whole is brought to the consistency of a lictus. When it has become cool mix it with six pala of bamboo-manna, two pala of long pepper and one pala each of cinnamon-bark, cardamoms, Kesara. This is the celebrated tonic

preparation called *chyavana-prāśa*. It is remedy for cough and asthma and it is especially said to promote the growth of the body in the emaciated, the ulcerated the old and the young. It also cures loss of voice, consumption, diseases of the chest and of the heart, leprosy, thirst and disorders connected with the urine.

By the use of *Chyavana Prāśa* when of great age was restored to youth. Intelligence, memory, beauty, health, length of life, power of the senses, eminent potency, increase of the digestive power, clearness of complexion and regularity of the airy humour all these acquired by a man.

THE VINDU CLARIFIED BUTTER.

Take one pala each of plumbago-root, and of the black and white varieties of turpeth-root, also (twenty-two) fruits of chebulic myrobalan and boil them down in half a drona of water, till the whole is reduced to one quarter of the original quantity. Then boil once more that decoction in one prastha of clarified butter, boiling with it a paste made of half a kudava each of *Nīlikā* (*Indigofero tinctoria*) and the juice (of *Sudhā*) This preparation of clarified butter known by the name of *Vindu* (or the Drops), is a remedy for numerous diseases. As many drops of it as the patient takes so many evacuations he will have. It cures enlargement of the abdomen, spleen, abdominal tumours, skin diseases, and cases of poisoning and it is recommended to women in the cases of abdominal tumours, fistula also in the case of piles, due to deranged bile, of the pressure of air upwards and of all diseases due to concurrent derangement of all the tumours; also in cases of illness due to administered poison and in diabetes.

AN OIL FOR HEADACHE :

Boil one kudava of oil, with twice as much of the juice of chebulic myrobalan throwing also pastes of one Karsha each of the following drugs :

liquorice Prapaundarika, fresh lotuses, long pepper and Sandal.

This oil should always be administered with two fingers. It cures any complaints in the head, it also restored the black hair of an old man, after being used for one year.

AN OIL FOR AN ANTIFEBRILE ENEMA :

Take Jivantī (Dendrobium-mutticaule) liquorice Medā, long pepper, Madana (Randia dumetorum), Vachā (Acorus Calamus), Riddhi, Rāsnā (Vanda Roxburghii), Balā (Sida cordifolia), dill, Śatarāsī (Asparagus race mosus) and having made them into a paste, boil the whole in milk and water together with clarified butter and oil This oily enema makes a remedy for fever. Through removing the vitiated humours. The patient gets rid of his pains, feels himself easy, and becomes thoroughly free from fever.

AN OIL FOR THE CURE OF NERVOUS DISEASES :

Take five prastha of the juice of radishes, curds, also three Kudava of Śukta and three of oil, also four pala of rocksalt and eight of fresh ginger ; but if fresh is not available, let it be sixteen pale of dry ginger. This preparation relieves sciatica, acute gout, also all diseases of the hips and nervous diseases.

AN OIL FOR AN ERRHINE FOR HAIR AND HEAD DISEASES :

Take the following ten ingredients, liquorice, Prapaundarika, Vrhātī (Solanum indicum) rock Salt and seeds of Adhaki (cajanus indicus), Harīnu Haridrā and long pepper. Make pastes of one aksha each of these and boil the whole slowly in half a prastha of oil and boil these four prastha in a new vessel of iron Then let it stand for a month in a box made of wood. This oil removes wrinkles and premature greyhair, and may even change the white colour of the cows, dogs, asses, camels and white feathered birds.

In the 4th part of Navanītaka there are two short manuals : One deals with the art of foretelling a person's fortune by means of cast of dice (pāsaka-Kevalī) : Let the dice fall for the purpose of the present object. Hīlī, Hīlī, Let them fall as befits the Skill Kumbhakārika, the Mātanga women "Let the dice fall openly, Svāhā, let the truth be seen, etc."

The fifth part is in fragments, and nothing can be made out of them. In sixth and seventh parts contain the Mahāmāyurividyārājñi which is a well known Dhāranī dealing with charms and spells, for protection from Snakebites. The Mahāmāyurī queen of spells, reads e.g., as follows : itti, mitti, tili, mili, mitsi, mitti, dumba, tumba Suyachirikasiya, bhinnamedī ananda, may the Deva vouchsafe fresh water, i.e. seven fold on every side, so that the lands may be abounding with water, overflowing from end to end, haritale, Kantale ilī, me May these words of charms be effective.

Besides the sanskrit original of medical texts there are other evidences to show that Indian medical literature was widely used in Central Asia. We know from translations of Indian texts into Khotanese languages that the knowledge of Indian medicine was very wide spread. Here is given an example of this :

Khotanese :

- (1) aurga tta brrahman halai · aurga tta Saidhavaidhyadaram rasaya hasaya halai Praise now towards Brahma, praise now towards the Siddhavidyadhara rsis
- (2) asvagamoha pamjsase sera ttejsa Kasapachai Ksa Samga utca tcera Sau Samgathamjamna · [da] Samula Sau Sau sera : balamula agnamatha : Syanaka Kasmir Yamula. Patala, Salaparna brrahatta, Kamndarya. darrmgulyai si ysira kutammatcahau Samga Ucajsa jsamnamns khura va Sau Samga harsta.

Asvagandha—15 sera, therfrom a concoction should be cooked ; 6 sanga water should be taken, one Sanga extracted ; the dasamulas 1 Sera each ; bilvamula, agnimantha, Bignonia Indica, Kasmir-yamula, patala, Salaparni (prsniparni) brhahti, Kantakarika, Cattle thorn—this should be firmly pounded, boiled with 4 sanga

water so that one Sanga is left.

- (3) ttalispatta mirimjaya dvi dvi macamga ttumgara drrim macamga : papala tacam macanga tvaca susmila sa sa macamga : Sakara pamjsa sira si camna pheha usyna aphara jimda kha-ysam virisa padimi spimijim vasuji ttavim nastausim nvava dimvamna nahiji ysaujsa sa camna aviysara jimda mamgara arja bamma jimda :

Talisapattra, black pepper,—2 macanga each, ginger—3 macanga, tvak, suksmela,—1macanga, each, each, sugar—5 sera , this curna overcomes cough, respiration troubles, opens purgation, show digestion, this tasty curna overcomes atisara, overcomes old arsas, vomiting.

- (4) Suksmila sa macanga tvaca nagapuspa . mirimjsya 4 papala 5 ttumgara 6 sakara 7 sira Sa camna agvaha jimda duvara arja.

Suksmela—1 macanga, tvak, nagapusha, black-pepper—4, pippali—5, ginger—6, sugar—7 sera this curna overcomes indigestion, overcomes abdomen enlargement, arsas, diseases in the heat, cough, respiration troubles, overcomes raktapitta, swollen belly diseases in the throat.

FRAGMENTS OF KHOTANESE

Jasta beysana hvava svastaka namma agada dasya asvagamdha pamjsase sera : ttejsa kasa pachai ksa samga utca teera sau samga thamjamna . [da] samula sausau . belamula agnamantha . syanaka

The medicine Svastika by name spoken by the divine Lord is finished. Asvagandha—15 sera ; therefrom a concoction should be cooked. 6 Sanga water should be taken, one sanga extracted the dasamulas—1 sera each ; bilvamula, agnimantha Bignonia Indica.

hatera dva : vihita, anumalai, svamna gura, kasmerya parusa, bela, drrammattima, jivaka, rimsabhaka, meda mahameda. Kaka-uta : mudgaparna, jivantta, mahabamja : sa balsa hammamga staka u mamgi, svida damda camda camda rum. gusta hevi

raysa hvakhamdalaja amstai hahvamna. kasavamjsa pachai

The two haritake vibhitaka, amlaka, in the second grape, kasmirya, paruska, bilva, seed, jivaka, rsabhaka, meda, mahameda, kakodi, mudgapharna, masvparna Jivanti, mahabhurja—all this equisly and bean milk as much as far; juice of meat, hog's bones should be hashed, a decoction cooked therefrom—

drrai samga utca tclairai khu ra va hasta saiga harsca, tta kase u arva baisa hamna hamna teera. u sau samga gyiha rum pachai, khu paha hame. papala sau sau sera nauka aramna hamna a terrai sakara pamja sera, maksı pamja sera sa rum harbaisam achamjsa paura; phaha uysna aphara. pajva guaharijsa hamye.

3 sanga water should be taken, so that 8 sanga are left these decoctions and drugs should be put into the same vessel and one sanga cow's fat; it should be cooked when it becomes cooked, sugar—5 sera. maksika—5 sera this fat defeats all and sundry diseases, cough, respiration troubles, consumption coming from table in the glands when the throat is obstructed.

pesva vine gamma baina, u salisammajsyā sumna raha u brraha raha · hamarva vine prrameha phariysgamna padamsamma ttavai ksaya · Uaismajvara ttabura acha jaida : sa raysaym dehauste pademaka u tvamnaki hauva husamnaka : ttye sau sera pamakyejsa hauramna.

pains in the sides; ache in the loin and backache pains in the joints, prameha, swelling in the bladder, fever, ksaya all these diseases it overcomes; this rasayana is a producer of virility and a fattener, an increase of strength, one sera in measure should be given.

Ysadam u vaittakam badana asvaghambhaya dase, kusti susmela : ttagara, ttalisapattrā datta devadara : elavaluka; camdam, nilamttipala rumnai vaisala · brrahatta kamndarya : halaidrra · ysalsa camdana sarava. Summamna sarava salaparna : prrasnaparna · haranva. paustara : viya sakheysara vamndamga : halira : vehela : ammalai prrayamga jattepuspi drammattema.

sa pamna arva dvi dvi macamgya hala : gviha rum dva saiga halai, sai arva samam kutamna · na nauka u na ysira sau samga ucaksa pachai sa rum kalyanai namma, hauva padime ucha sairka, birra-vausta jaida · humna padime . ttavai. apasmara prameha : arja : ksaya unmada be prauraka cu baina humna aphede pamndarauga : gamma uysana aphara haika muttrakaicha · ttapura acha baisa jaida : khu ha tti jevaneya arva yanede ·

Finished the Asvaghandhadi Kustha, suksmela, tagara, tales-pattra, danti, devadaru, elavaluka, candana nelotpala, madder, visala, brhate, kantakarika, haridra, curcuma, candana sariva, sumana sariva, salaparni prsniparne, harenuka, prunuspuddum, lotus filaments, vidanga, haritaka, vibhitaka, amalaka, priyangu, Jatepuspa, pomegranate seed, each of these drugs— $2\frac{1}{2}$ macanga each cow's fat— $2\frac{1}{2}$ singa=this fat should be evenly pounded, not gently and not firmly—cooked with one sanga water. This fat, kalyanaka by name, produces strength and good complexion, overcomes insomnia, produces sleep, a remover of fever, apasmara, prameha, arsas, ksaya, unmada, poison, when the blood deranged through wind, panduroga, gulma, respiration troubles, hikka, muttrakroccha—so many diseases does it overcome.

halirai papala · ttamgara : mirajisya . ara · kalyaruhane : spaju yavaksara : vandanga : caittrai sa pamna arva drrai drrai macamgye · gviha rum dva saiga halai sa arva samam kutamna hatca rumna hamna tterai

u hasti saiga ha ttira ne terai si rum pachai ba va naimesa viste. khasamna nva hauvi :

baina gamma jaida : spajai vasuje arja jaidam phahi : uysana aphara piramna jaida u ysira vira bisa acha : dasamga namma bausta ste visairaramna mamnamda gara bausdim tta tta sa rumna acha jaida : dasamga namma rum ste o

Haritaka, pippali, ginger, black pepper, Acorus Calamus, katukarohini, alum, yavaksara, vidanga, citraka,—each of these drugs—3 macanga each ; cow's fat— $2\frac{1}{2}$ singa, this drug should be

evenly pounded, put into a vessel tother with the fat, and 8 singa sour curds added : this fact should be cooked, applied in the direction of the wind, drunk according to one's strength . it overcomes wind gulma, cleans the spleen, overcomes arsas, cough, overcomes respiration troubles, diseases from worms and in the heart,—is known by the name Dasanga

As the thunderbolt jewel brusts the hills, so this fat overcomes diseases,—it is the fat Dasanga by name.

vasakim ttairstya : kalyaruhani gura : drammattima ttima
sa pamna arva tcau macanga samau kutamna
gviha rum dva saiga halai gviha ni dva saiga halai
gviha svida dva saiga halai gviha samna hivi raysa
dva saiga halai gviha biysma dva smga halai :
sai rum bhuttakalyamnai namma. vismajvara janaka
cu avaramjsi ttavi cu sahadmjsu cu drrahadmjsu
tcurahadamjsu hamye hadim vim ksayi
ca mamgara ttavim harbisam vi saira ida
bisum jaida bhuttakalyamni namma rum :

vasaka, triyasti, katakarohini, grape, the seed pomgranate seed,—each of these drugs—4 macanga each, should be evenly pounded ; cow's fat— $2\frac{1}{2}$ singa, cow's curds— $2\frac{1}{2}$ singa, cow's milk— $2\frac{1}{2}$ singa, juice of cow's dung— $2\frac{1}{2}$ singa, cow's urin— $2\frac{1}{2}$ singa—each of these drugs and juices should all be put into a vessel, cooked ; this fact, Bhutakalyanaka by name, is overing visamajvara, when there is a continuous fever, when one of every and, every 3rd day, every fourth day, in the same day, ksaya, when there is old fever,—in all and sundry it does good, overcomes all kinds—the fact Bhutakalyanika by name.

nilamtpala drramgulye prrapundari : papala imstabava sadalum
tvaca si pamna arva bimsa hammamga drrim drrim macanga
staka samam kutamna sau samga kumjsavinim rum u sau singa
gvihi svida hasta siga : si arva rum bimsi hamna tcira si rum nva

dimna pachim mimstye atrim rasayina hva · cu haysgva mattumna
bausa narammi sim jimda tti va pirmattam :

nimtraupalmbu namma tcimmanam va pirmattam
patala ttamirim kasa pyasty ca siyi na vijimsdi :
cu ysa nahamna tti tcimmina prahisida hauva cha sivrka padimi

garsa hambva gvamna vini kamina vini u acha jimda
uysna aphara phahi. hika ttiyambura acham va ni mamnamda.
nimtrautpalabu namma rum

nilotpala, cattle thorn, prapaundarika, pippali, hogweed root, rock salt, tvak,—each of these drugs, all evenly,—3 macanga each required ; should be evenly pounded ; 1 singa fat of sesam and 1 singa of cow's fat, milk—8 singa ; this, drugs, fat, should all be put into a vessel ; this fat should be cooked by gentle fire ; told by the great rsi Atreya it overcomes stinky smell when it comes in the nose, the very best in this,

Netropalambuka by name, the very best for eyes :
patala, timira, kaca, lid tumour, when a child does not see ;
when one is born blind, his eyes are opened, it produces good strength complexion, overcomes festers in the throat, pains and diseases in the ear, respiration trouble, cough, hikka, in all these diseases (it is) like nectar,—the fat Netropalambuka by name.

rimdha Parusa khavari. gura brrahatti srirngamtakyi
ttumalakı svida bava. papala sachabava barasiji
sa pamna arva dvi macamgyi samam kutamna
sim kikiya arvi ammalai dva sıra imksa dva sıra
tta hamida arvi drrim samga ucaksa jsamnamna
khu ra va hasta simga harsta. buysina hvasa hahvana
dva samga ucaksa jsamnamna khu ra va tcau simga harsti
gviha rum dva simga halai svida hasta siga
bimsa hamida hamna tcirim pachim khu paha hamı ·

aysdimamna khu drram hamı khu aspa ttiburim ha
 arva tcirim arda tharka mijsa. khajura vammiram.
 avisakyi : majattakı tcau tcau macanga :
 ttalispattra suksmilan nagapuspa tvaca lavanga
 sı pamjsa pamjsa macanga sakara tcau sira
 sa hamidakı aramna nauka rumna hambrrıhamna
 sirum nva pamdamı nva ttamramdarum dim pamakyıjsa khasamna

bısaburı amrrattaparasa namm hvamndam Va ni manamda sa rum
 bımdı ha svida tsammamna a Va grramma ysumam.
 ca sıya na hu yanıda ttyam humnı padımı
 cu ksaya achım pijva gvahı nastausım gısa
 bahauva sara hauva padımı achım gauda tvamna

rddhi, parusaka, Clerodendrum siphonantus, grape, brhati, srngat-
 takı,
 tamalakı, roots of milk trees, pıppalı, Sıda root, jujube,—
 each of these drugs-2 macanga each, should be evenly pounded :
 this as paste drugs . amalaka-2 sera, iksu-2 sera ;
 these combined drugs should be boiled with 3 sanga water
 so that 8 singa are left ; goat's hash should be hashed,
 boiled with 2 sanga water so that 4 singa are left ;
 cow's fat—2½ singa, milk—8 singa ,
 the whole combined should be put into a vessel, cooked ; when it
 becomes cooked,

it should be cooled ; when it becomes such as aspa, the following
 drugs should be added : marrow of kneaded walnut, kharjuras,
 vamamıras

avisaka, manjataka,—each 4 macanga,
 talisapattre, suksmela, nagapuspa, tvak, lavanga,
 this—5 macanga each, sugar—4 sera ;
 this combined should be kneaded gently, mixed into the fat ;
 this fat should be drunk to measure, according to one's natural
 state, following the bodily fire ;

the whole, Amrtaprasa by name, this fat is like nectar to men ;
milk or hot broth should be made to go into it ;
it produces sleep to these little ones who do not get sleep,
when there is ksaya disease, tabes in the glands, consumption,
giddiness,
reduced strength, it produces good strength, fattens emaciation
disease ;

CHAPTER V

LIST OF THE DRUGS AND DISEASES IN THE BOWER MANUSCRIPT

Drugs :

- Aṁsumati—*uraria lagopodioides*, 1132, 121 ; *Desmodium Gangesicum*, 1141, 301, 75, 1093 (Ref. Bm. p. 241)
- Akta—greased with, mixed with, in madhughṛta—akta, greased or mixed with honey and clarified butter (Bower manuscript, General Sanskrit Index p. 241).
- Aksha—*Terminalia bellerica*, beleric myrobalan (Bm. p 241)
- Akshoda—*Juglans regia* (Bm. p. 241)
- Agaja—a kind of spirituous liquor (p. 241)
- Aguru—*Aquilaria Agallocha* (p. 241)
- Ajāji—*cuminum cyminum*. (p. 241)
- Adhyanda—*Hygrophila spinoda* (p. 243).
- Amarājā—inferior *Acacia Catechu* (p. 245).
- Amaradāru—*Pinus deodadara* (p. 245).
- Amalaki—*phyllanthus Emblica* (p. 245).
- Chidā—*Pinus lengifolia*, II. 65, 856 (Bm. 271)
- Chitra—*Plumbago* root (p. 271)
- Cloraka—*Trigonell corniculata*, II, 27, 27, 52, 522 (272)
- Japa—*Hibiscus Rosa* II, 70, 959.
- Jati—*Jasminum grandiflorum* II, 66, 879.
- Jhāmaka—a kind of fragrant grass, I, 7, 90, 91.
- Dombuka—*Oroxylum indicum*, II, 640, 837. (p. 274).
- Tinduka—*Diospyres Embayapteris* II, 32, 113, 52, 519

- Tukākshīra—*Bambusa arundinacea*. II, 74, 1080.
- Tunga—*Cullophyllum Inophyllum* 16, 71. (p. 276).
- Tejavatī—*Piper chaba*, II, 28, 41. (p. 277).
- Trāyanti *Ficus heterophylla* II, 29, 57.
- Trivṛt—wild variety of *Ipomoea Turpethum*, (p. 278).
- Thoneyaka—a certain fragrant plant (p. 279).
- Danti—*Baliospermum mentanum*. (p. 279)
- Daruharidreka—*Berberis asiatica* (p. 280)
- Dūrvā—*Cynodon dactylon* (p. 281).
- Bhadradāru—*Pinus deodara*, II, 75, 1082.
- Bhadraśrī—*Santalum album* 1, 6, 72, 7, 94.
- Bhallātaka—*Somocarpus Anacardium*, marking-nut II, 28, 47, 42, 315.
- Bhārgī—*Cloredendron siphonantus*, I, 9, 124, II, 27 20, 28, 48.
- Bhūtīkya—*Andropogon Schoonanthus* II, 44, 354.
- Bhūnimba—*Ophelia chirata*, *chiretta*, II, 29, 57.
- Mañjishṭhika—*Rubia cordifolia*, madder, II, 51, 501.
- Mandukaparnī—*Hydrocotyle asiatica*, I. 5, 52.
- Madana—*Randia dumetorum*, II, 45, 383, 386.
- Madayanti—*Jasminum Sambac*, II, 68, 912.
- Madhūka—*Bassia latifolia*, II, 51, 494.
- Mahā-Kalyānaka—a kind of medicated clarified butter or ghee, II, 3, 132.
- Mahā-druma—*Ficus religiosa* III, 181, 6.
- Māmsī—*Nardostachys Jatamansi*, I, 7, 91, 92, 97, 8, 107, II, 31, 96, 53, 535, III 183, 40
- Māgadhi—*Cuminum cyminum* white cumin, II, 74, 1079
- Māgadhi—*Piper longum* ; long pepper II, 29, 60 ;
- Māruta—*Eleusine cerocana* I. 9, 125.
- Mālatī—*Jasminum grandiflorum*, III, 182, 26.

- Mūrva—*Sansevieria Zeylanica* I, 6, 68, 7, 98, II, 29, 57, 33, 139, 51, 491, 76, 1118 ;
- Mulaka—*Raphanus Sativus*, radish II, 55, 585, 74, 1078.
- Mṛmālī—the leaf stalk of *Nebembium speciosum* lotus ; II. 33, 127, 75, 1101
- Mechika—*Moringa Pteryesperma*, II, 47, 415.
- Meshaśringī—*Asclepias geminata*, I, 4, 35.
- Mocha—*Bombax Malabaricum*, II, 47, 421, 62, 791.
- Yavānī—*Carum copticum* II. 26, 14, 29, 56, 30, 78, 81, 31, 88, 51, 491.
- Yavāsā—*Alhagi maurorum*, II, 64, 821.
- Yashtihva—*glycyrrhiza glabra*, liquerice, I, 7, 91, 8, 106, II, 56, 607
- Yasa—*Alhagi maurorum*, II, 47, 415.
- Rakta—Śālī-red variety of *oryza sativa*, red rice II, 55, 598
- Rāmatarunī—*Rosa alba* II, 68, 901.
- Rāmathaka—*Alangium hexapetalum* II, 37, 219.
- Rubūgaka—*Ricinus communis*, castor oil plant II, 75, 1097.
- Lāngala—*gloriosa superba* III, 184, 63.
- Lāmajjaka—*Andropogon caniger*, II, 41, 294, 299.
- Vata—*Ficus bengalensis* III, 184, 65,
- Vana-Paruśhaka—*Paruśhaka*—wild *grewia asiatica* II, 51, 502.
- Varana—*crataeva religiosa* II, 38, 233.

Diseases .

- Akākolina—an unknown disease (p. 241).
- Agnipratighāta—obstruction of digestion, indigestion (p. 241).
- Agni-Mārdava—weakness of digestion, dyspepsia (p. 241).
- Agni-Sāda—Slackness of digestion, dyspepsia (p. 231).
- Ajīrna—indigestion (p. 242).
- Atisāra—acute diarrhoea (p. 243)

Adhimantha—a disease of the whole eye, severe aphthemia.
(p. 243)-

Abhinandana—want of desire or relish for food (p. 243).

Anambla—not sour (p. 243).

Anuvyādhī—a symptomatic disease on an another state (p. 243).

Antra-Vṛiddhi—hernia (p. 244).

Apasmāra—epilepsy (p. 244).

Abhishyanda—inflammation of the eyes (p. 245).

Abhīlu—Moles (p. 245).

Ardita—facial paralysis (p. 246).

Arvuda—tumour, (p. 247).

Arśas—piles (p. 247).

Arśo-Vikāra—Disease of piles (p. 247).

Alasaka—tympanitis (p. 247)

Alasaka—inflammation and swelling of tongue (p. 247).

Asṛigdara—irregular menstruation (p. 248).

Udara-Śula—pains in the belly (p. 253)

Udarin—One who suffers from enlargement of the abdomen
(p. 253)

Upagulam—small abdominal tumour (p. 253).

Uro-ghāta—Spasm in the breast (p. 254).

Uro-roga—disease of the breast (p. 254).

Uro-Vivandha—obstruction, Spasm in the breast. (p. 254)

Ekāṅga—paralysis in one limb (p. 255).

Jadatva—torpor, apathy (esp. with. respect to the organs of sense
and the brain p. 272).

Jathara—enlargement of the abdomen (p. 272).

Chhardi—vomiting emesis (p. 272).

Tandrā—lassitude, (p. 275)

Timira—catact (p. 276).

- Tilaka—pigmentary mole (p. 276),
 Dadru—ringworm (p. 275).
 Dāha—morbid internal heat (p. 280).
 Duch-Chhardita—bad vomiting, VI, 223, 1.
 Dvetyaka—recurring/every second day (p. 282).
 Nīrvāhikā—acute diarrhoea (p. 286).
 Nishkeśa—entire baldness (p. 286).
 Vardhma—scrotal enlargement, hernia II, 38, 230, 42, 317, 334.
 Vartma—scrotal enlargement II, 37, 208 ; see vardhma.
 Rohinī—diphtheria, II, 72.
 Rāja-Yakshman—phthisis, pulmonary consumption, II, 59, 756.
 Yakshman—phthisis, II, 60, 756.
 Meha—morbid secretion of urine, II, 30, 70, 44, 359.
 Mūkatva—dumbness, II, 39, 260.
 Mahā-Kshaya—rapid consumption, II, 31, 86.
 Makshi-Roga—a kind of skin diseases, VI, 223, 4.
 Bhagandalā—same as Bhagandara, II, 29, 53.
 Bhagandara—fistula in ano, II, 30, 70, 37, 221, 39, 249, 45, 378,
 III, 189, 9, 43, 183, 43, 184, 64, in Bhagandara vināśana.
 Kachchhapa—hypertrophy of the tonsils, II, 39, 254.
 Kandu—itch, scabies, II, 57, 632, 67, 887.
 Kampana—morbid trembling, shaking II, 43, 335, 45, 377.
 Kāmala—severe jaundice, II, 38, 230, III, 184, 70. fem Kāmalā,
 II, 29, 53, 33, 142, 43, 342, 51, 489, 56, 614, 70, 902, 72, 1031,
 III, 183, 44.
 Kāsa—cough
 Kāsa-ghna—curing cough, Bower manuscript
 Kāsa-nāśana— „
 Kāsa-vāraṇa— „
 Kāsa-vināśana— „

Kāsa-pranūṭ—

„

Kitibha—a kind of skin disease, tumour II, 33, 136, 76, 1109, III, 181, 4, 183, 49.

Kṛtasa—a kind of skin disease, leucoderma, II, 51, 493, 72, 1043.

Kukshi-vedanā—pains in the abdomen II, 31, 103.

Kundala—displacement of the bladder II, 42, 317, 43, 334.

Kubja—humpbacked, III, 183, 42

Kuṣṭha—a kind of skin disease, black leprosy I, 4, 38, 8, 100, II, 45, 378, III, 182, 13, 24, 184, 56

Koṭha—a kind of skin disease, II, 54, 568.

Kṛmi—worms, II, 33, 142, 72, 1022.

Khalati, Khālitya—baldness I, 8, 116, 112, 9, 117, 118

Gānda—tubercle, tumour II, 33, 142

Ganda-mālā—chronic enlargement of the lymphatic glands, II, 33, 142, 39, 249, 46, 401, 402, 403, III, 181, 4.

Gadgadatva—defect of stammering, II, 39, 260

Gādha-Vin Mūtra—Krichhra-Severe pains caused by obstructed foeces and urine, alvus coactā and strangury, II, 58, 644.

Gulma—abdominal tumour, II, 28, 36, 34, 151, 40, 272, 50, 489, 60, 748, 69, 939

Grīdhrasī—sciatica, II, 43, 333, 45, 392.

Chāturthaka—quarter fever VI, 223, 2,

Chhardi—vomiting III, 184, 69

Jatahara—enlargement of the abdomen II, 29, 53, 69, 940.

Jaḍatva—torpor, apathy esp. with respect to the organs of sense and the brain, II, 260.

Jvara—fever, II, 40, 271, 59, 729.

Jvara-Kāśita—troubled with fever, II, 38, 224 ;

Jvara-nāsana—fever curing II, 34, 154, 56, 612, 613.

Tama-Śvāsa—asthma accompanied with stupor II, 50, 479.

Timira—cataract, II, 66, 858, 859, 67, 890.

- Timira nāśana—curing cataract II, 66
- Traitiyaka—tertian fever (occurring every third day), VI, 233, 2.
- Dadru—Ringworm, II, 72, 1034, 76, 1109, III, 181, 4 ;
- Dadru-nāśana—curing ringworm II, 54, 565.
- Duch-Chhardita—bad vomiting VI 223-1.
- Daurbalya—weakness II, 40, 271.
- Nadi-Vrana—fistulous sore III, 181, 4.
- Nirvāhikā—acute diarrhoea, II, 47, 427
- Nilika—black spots, I, 8, 100.
- Patala—the final stage of the development of the cataract II, 65, 849, 66, 874, 67, 887
- Paridāha—sensation of burning interval heat, II, 74, 1066.
- Pāndu—morbid pallor, chlorosis, II, 56, 614
- Pāman—eczema, II, 53, 546.
- Paulya—blear eyedness, II, 65, 854, 857
- Pratānaka—(hysteria) convulsions, II, 43, 340, 69, 941.
- Prameha—morbid secretion of urine, II, 28, 36, 57, 632, III, 184, 69.
- Pravāhika—dysentery II, 70, 943.
- Pliha—spleen II, 29, 53, 37, 203, 208, 40, 272, 42, 323, 63, 809.
- Bisphotaka—boils II, 74, 1066.

CHAPTER VI

GLOSSARY OF KHOTANESE TEXT

aksattamda—name of a fat

agada—Skt. antidote, drug

agara—Skt agaru-fragrant Aloe, Aquilaria Agallocha ; -ada- name of a powder

agnimantha—Skt. Premna spinosa

agvaha—indigestion

agvaha—undigested food

amga—Skt limb

amgusda—Asa foetida

ajita—Skt name of a fat

ajsata—not beaten, not slain

ada—this very

anavaysana—Skt. anuvasana-oily enema

anasasa—Skt. anusasana-prescription

apasmara—Skt. epilepsy

apamarga—Skt. Achyranthes aspera

ambala vettarasa—Skt amla vetasarasa-sour juice of Rumex vesicarius, Indian sorrel

ambrastha—Skt. amrasthi-mango kernel

amrrattattimttim—Skt. amrtatikataka-name of a fat

amrrattaprasa—Skt. amrtaprasa-name of a fat

amrrattasadava—Skt. amrtasadhaka-name of a fat

aysura—Skt. asura-a kind of demon

arusa—Skt. arocaka-loss of appetite

- arkaksira—Skt. milky sap of *Calotropis gigantea*
 arja—Skt. arsas-piles (also miswritten for ajam, Skt. amjana-
 unguent)
 arva—(old aruva) medicament, drug
 avaramjsia—not going back, continuous
 avastha—(loc. avastya) Skt. the place of the foetus in the womb
 avisakya—Skt. avisa-Curcuma Zedoaria
 aviysara—Skt. atisara-dysentery
 asuca—Skt asuci—impurity, faeces
 asphamnda—translates saptacchada—*Alstonia scholaris*
 asmarya—Skt. asmarkka—strangury
 asvagandha—Skt. *Withania somnifera* ,—adi . ,—aya—names of
 fats
 asvana—Skt. asvin—the twin gods Asvin
 asambaja—Skt. asampad, ill luck, misfortune
 aspa—(uspaka— ?) unidentified, perhaps cake, dough
 asrgdara—Skt. irregular menstruation, menorrhagia
 aharina—without remainder, all together, every
 ahauvam (old ahotana—) powerless, strengthless
 ahvade (gen. ahvadmda) one who has not eaten gen. on one
 empty stomach a and, or
 achaa—disease ; achanaa—achanim diseased
 atmagupta—Skt. *Mucuna pruriens*, cowhage
 ana—, am seated, staying ; now ; anajsa while seated, at once
 anaha—Skt. costiveness
 aphara—trouble, derangement ; aphida—troubled, deranged
 amalaa—Skt.—laka—*Phyllanthus Emblica*, emblic Myrobalan
 aysdarja—(old aysdarja—) care, guarding
 aysma—measured out, tested

alavaya—translates Skt. *murva*—*Sanesriera Zeylanica*, bow-string
hemp

astaa—bone

aha—(loc. eha) mouth

ahvaraa—fem —rja—sour

ikabahaka—Skt. *ekabahuka*—paralysis of one arm

imksa—Skt. *iksu*—*Saccharum officinarum*, cane sugar

indrahasta—Skt. an unidentified medicament

irandittila—i.e. *erandataila*—Skt. castor oil

Isya—some kind of tumour, perhaps corresponding to Skt.
pidaka, fistula

is ah—

iramda—adaptation of Skt. *eranda*—*Ricinus communis*, inaa—
derived from the castor oil plant

u and ; una ana then and there

ui senses, mind

udavartta—Skt. *ileus*, retention of discharges

udaisaya Skt. *uddisya* with reference to, with a view to

unmada—Skt. *insania*, madness

upattamttraka—Skt. *apatantaraka*—apoplectic convulsion

upadrava—Skt. calamity, complication

uysana—uysna—breath , u. aphara—respiration trouble

uysdaimamna—that should be cooled

usaira—Skt. *usira*—*Andrapogon muricatus*

uskatta high, above , uskyasta upwards

usthamjana—that should be extracted

utca—(gen. uce & c) water ; ucanamva—sea-salt

uma—umata—to be numbed

ura—womb, bowels , uranika, abdominal tumour uramdāa—
aramdāa—intumescence

- uruska (m) bha—Skt. urustambha—paraplegia, paralysis spinalis
 usa—Skt ojas—strength
 aiksa—Skt. aiksava—cane sugar
 elavaluka—Skt. bark of Feronia Elephantum
 aista (imsta—, austa—) translates Skt. punarnava—Boerhavia
 diffusa, hogweed
 aujam unidentified, perhaps corruption of Skt. ajaji—Cuminum
 Cyminum, cumin-seed
 aurga—praise, worship
 ausaa—translates Skt. jiraka—Panicum miliaceum, cumin seed
 austa—Skt. osthā—lip
 kamtaphala—Skt. name of several plants
 kandarya—Skt. kantakarika—Solanum xanthocarpum ; kantakary
 —ada—name of a fat
 kana—drop
 kapaysa—Skt. Karpasa—Gossypium Stocksii, cotton plant
 kapittha—Skt. kapittha—Feronia elephantum
 kapura—Skt. karpura—camphor —rada—name of a powder
 kaba—Chin. kap decilitre
 kama—(loc. kamana) which
 kamala—(loc. kamena) head ; raha—headache
 kampilaa—Skt. kampilyaka—Mallotus Phillipinsis
 kara—circle, round
 karamja—Skt. Pongamia Glabra
 karkatasrangi—Skt. Pistacia integerrima ; karkatada—name of a fat
 kalak—Skt. thin paste ; -ja—paste forming
 kalyaruhana—Skt. katukarohini—Picrorhizza kuroa
 kalyanaa—Skt. -ka- name of a fat
 kasmirya—Skt. kasmiri—Gmelia arborea
 kasa—Skt. kasaya—decoction

kasa—kasta-to fall, to fail

kasaa—falling, intermittent fever

kakanasa—Skt. Leea hirta

kakauta—Skt. kakodi-Luvunga scandens ; abbreviated kaki-

kamja—Skt. kancika-sour gruel

kamnda—Skt. stalk

kamdara—cf. Skt. kandeksu-Saccharum spontaneum

kama—,kam which

kamanigrraha—Skt kaminigraha-the demon Kamini

kamala—Skt severe jaundice

kayastha—Skt Myrobalanus Chebula (and othe plants)

kara—deaf , -na- deafness

kaliyaka—Skt. yellow sandal

kasa—Skt. kaca-the medial stage of cataract

kadana, kadna, kina for the sake of

kara-work, business

kumjsata—sesam ; kumjsavinaa-of sesam

kurkutada—name of a fat

kurkum—Skt. kunkuma-Crocus sativus, saffron

kulasta—Skt. kulattha-Dolichos biflorus

kusta—,kausta-Skt. kustha-black leprosy

kuta—to grind, to pound

kura—crooked, wrong ; k. hira crooked matters, witchcraft

krra—Kst. kriya-performance, treatment

krrimga—, krraiga-cock, fowl , -ruvaa-anus

kri/aisnagara—Skt. Krsnaguru-black aloe

kveysa—kve/iysa-side

ksa—six

ksata—Skt ulcer, ulceration

ksama—to agree with, to please

ksaya—Skt. emaciation, consumption

ksasa—sixteen

ksara—Skt. caustic ashes, lixivium

ksirakakauta—Skt. ksirakakodī-Tritilaria Stracheyi

khajura—Skt. kharjura-Phoenix sylvestris, date palm

khajsa—deep-seated abscess, translates Skt. vidradhi

khanausa—Amphidonax Karka, or Andropogon muricatus

kha/uysma—boil, blister

khara—Skt khadira-Acacia Catechu

kharaspa—Skt. kharasva-Carum Roxburghianum, caraway ;

khara spada-name of a fat

khavara—translates bhargi-Cleroendrum Siphonantus

khasa—drink kh. arja-(i.e. amjana) translates Skt. pananjana-an
unguent that should be inbibed

khasta→damaged

khaysa—food

khaysana—,khaysam-intestines, guts

khasa—khasta-to drink

khysara—Skt. kesara-filament

khu as, so that, when

khuysaa—translates Skt. manduki-Hydrocotile Asiatica

gajapapala—Skt. gajapippali-Scindapsus officinalis

ggamjsa—blemish, fault, evil

gamdamala—Skt. chronic enlargement of lymphatic glands, adenia,
adenitis

gamdundamna—due to Garuda (adaptation of Skt. garuda..)

ganiha—ganista—to moisten

ganhanalamdha—Skt.—nalada—fragrant Nardostachys Jatamansi

gandhapattra—Skt. a variety of Curcuma

- gandhapriyamga—Skt. fragrant priyangu
 gandhamurva—Skt.—mulika—*Emblca officinalis*
 gandharva—Skt. a kind of supernatural being
 gaysa—reed
 gara—hill, mountain
 garsa—throat
 gisaa—giddiness
 gisaa—stiff grass
 gujsana—gujsa (ta)—to strike, to smite
 gunn—Skt. ghuna—a skinned, peeled, husked
 gula—, gaula—Skt. guda—molasses (—thamna instead of mola-
 sses) ;—lusa—Skt. guduci—*Tinospora cordifolia*
 gulma—, gamma—Skt. gulma—abdominal tumour
 gucha—guta, inchoat. gusa—to release, guchama—release, gausa-
 ma—the same
 guna—characteristic, mark , sign of six, penis, linga
 gura—grape ;—rutca—grape brew
 guva—Skt. gutha—ordure ; ear-wax
 gusta—meat
 guhi—gen. gviha cow
 gauda—emaciated, lean
 grantha—Skt. granthi-knot
 graha—Skt seizure, demoniacal possession
 grahani—Skt. small intestines and diseases in them
 gramma—,—aka—warm, hot
 gridhasi—Skt. grdhrasi sciatica
 gva—ear
 gvahaiya—pain, debility, tabes, aching
 gvacha—to cause to be digested
 cakurika—renders Skt. cangeri—*Oxalis corniculata*, horned wood-

- sorrel ; probably corrupted through Skt. cakoraka—
 canda—as mouch, as great
 candana—Skt. Santalum, sandal ,—sariva—Ichnocarpus fructes-
 cens ;—nada—name of a powder
 cabura—as much as
 carattaihtaa—, carutta—Skt. ciratatikta—Ophelia Chirata,
 chiretta
 carmadala—Skt. a slight form of leprosy
 cavyada—name of a fat (cavya—Piper Chaba)
 camkalina—from Skt chagala—coming from a goat
 camgirada—(i e. cangeryadi—) name of a fat
 camna—Skt curna—powder ;—kavi—cuttle—fish
 caya—magic
 carthim—Skt. caturthaka—quartan fever
 cima—Chinese , cingam ttirai hiya pira—shoot of the bitter—
 tree of the Chinese, translates Skt. nimba—Azadirachta India,
 neem
 citraka—Skt. Plumbago Zeylanica, leadwort
 cista—youthful fresh
 cu s ca
 cuvam translates Skt. rasanjana—extract of the wood of Berberis
 asiatica, rasot
 cauraka—Skt. Trigonella corniculata
 errama—, caram such as, which
 cha—Skt. chavi—colour, complexion
 chadrasta—i.e. chidrosta—Skt chidravat—perforated, intersected
 chaya—Skt. nightmare
 jamtti—Skt. jatu—lack, gum
 jambrrastha—Skt. jambvasthi—stone of Eugenia Jambolana
 jambviya—Skt. jambudvipa—Jambudvipa—India

jaysarumna white hairs

jara—(old jagarra—) liver

java—s. jina—jata—

Jasta—god ; j. beysa—Buddha

jaha—jasta—to be cleaned, healed ; jahamma—healing, cure

jattipuspa—Skt. *Jasminum grandiflorum* ; jattiphala—nutmeg

jamaki (Skt. text jammaka) unidentified

jina—jata—(java—) to overcome, to remove, to cure ; javattaram-dara—whose body is exhausted ; javahauva—whose strength is suppressed

jisa—jista—to boil (gerund jsamnamna—)

jīya—pass of jina—to disappear (pres. 3 pl. jārī)

jīmya—Skt. *jaya-Premna spinosa* and other plants

jīvas—Skt. —ka— nama of a famous physician

jīvaniya—Skt. quickening medicine

jīvantti—Skt *Dendrobium Macraei*

juna—times

tcamjsa—hair

tcanaa—wrinkle

tcamna—wherewith

tcāhīmssa—forty

tcāhaura, icāhau, tcāu four ; tcāurabīmsta twenty four

tcārana—able, feasible

tcāima—, tcīma—eye ; tcīmaja—pertaining to the eyes

tcēraa—faciendus, ha tc. addendus

jsahara—abdomen, belly

jsa—to go

tvaca—Skt *tvak Cinnamonum Zeylanicum*, cinnamon

tvana—to fatten ; tvanaka—fattening taa, ttaka so, thus, also ; ttaamna so sitting, then

- tta—oblique demonstrative this, that ;—bura—so many, the following
 ttagara—Skt. Tabernaemontana coronaria ; also miswritten for ttumgara—
 tajsā—to flow
 ttajsāa—running
 ttani—body
 ttambira—translates Skt. kustumburu—Coriandrum sativum, coriander
 ttara—thirst
 ttaramdara—body ;—ru dai body fire, digestion fire
 ttardyatha Skt. tadyatha as follows
 ttavaa—fever
 ttamvamdyā—bile
 tta so, now
 ttagutta—Tangut, Tibetan, —ttam busamni spice of the Tanguts, translates Skt. aguru—Aquillaria agallocha, fragrant aloe
 ttamalaka—Skt. —kī—Phyllanthus urinaria
 ttarī—forehead
 ttaalis
 ttalis [a] pattra—Skt. leaf of Taxus baccata
 ttjavitta—Skt. t̥t̥idika—Tamarindus Indica
 ttamira—, ttamira—Skt. timira—cataract (early stage)
 ttirstya—(ttairstya—, ttirstya—, ttimsoya—) Skt. triyasti—Oldenlandia corymbosa
 tti then
 ttima—, tti—seed
 ttira—sour, bitter ; ttiraa—‘the bitter one’, the tree with bitter fruits, neem ; s. cimga
 ttisa—Skt. tejas—energy ; ttisa (u) sta—energetic
 ttukaksira—Skt. Bambusa arundinacea, Bamboo—manna

ttumgara—ginger

ttura—mouth

ttauda—fem. ttauca—hot ; ttauda heat, inflamed state of body, feverishness

trattiyika—Skt. trtiyak—tertian fever

ttraha , ttreha—, ttriha radish

ttrayamamna—Skt. Ficus heterophylla ; —nada—name of a fat

ttriphala—Skt. designation of the three myrobalans

ttruysa—Skt. trapusa—Cucumis sativus, cucumber

ttrusala—corruption of Skt. tryusana—the three peppers, i.e. pippali—‘long pepper’, marica—‘black pepper’, sunthi-(ttum-gara) dry ginger, name of a fat

ttraiksa—harsh, sharp

ttrola—from Skt. triputa—Ipomaea Turpethum, turpeth

thamga—a certain weight, translates Skt. prastha...

thamja—thiya—to pull out, to extract

tharka—walnut ; th. mīsa—walnut kernel (lit. marrow)

thana—Prakrit place ; —na in place of

thyau quickly

da (m) tti—Skt danti—Baliospermum montanum

damda—so much, so great

dmdaa—Skt. dantaa—tooth, grain (?)

dara—Skt. udara—enlargement of the abdomen

dalaa—shell, bark, rind

dasamula—Skt. name of a fact

dasau ten

dasta—hand

dhausti—virility

dandamastaa—Skt. dadimastaka—name of a fat

dhattakīpuspa—Skt. flower of Woodfordia floribunda

- dhatti—Skt. dadhika—name of a fat
 dasa—dasia—to be finished
 data—appearance
 dada—third
 disa—to throw
 duralabha—Skt. Alhagi Maurorum
 duspata—weak ; duspyatta—weakness, debility
 dussthava—of inferior strength
 du—duta—to strike, to beat ; dvyamma—beating
 dutira—s. duvara—
 dhupana—Skt. fumigation
 duvara—, dutira—Skt. udara—enlargement of the abdomen, of
 eight kinds
 dusa—Skt. dosa—humour, complaint
 dusta—Skt. dusta—diseased, vitiated
 dai—fire ; dimvamna—the digestive fire, digestion
 devadara—Skt.—ru—Pinus deodara, deodar
 dravanti—Skt. Ipomoea reniformis
 dramgulya—adaptation of Skt tryangulika, translates goksura—
 Tribulus terrestris, cattle—thorn
 dramma—, dram such
 dramma—Skt. dadima—Punica granatum, pomegranate
 drunaa—healthy
 druba—Skt. darbha—Imperata cylindrica, or Sacharum cylindri-
 cum
 drai, drim three
 drva—to run, to swarm
 drrvamnda—translates Skt. vrscika—scorpion, cf. Skt. drona—
 vrscika—
 dva, dvi two ; maramsatti (i.e. dvimaricasatika—) name of a
 paste ; dvarabaista twenty-two ; dvaradimrsa thirty-two

dvasa, dvassa twelve

m enclitic pronoun ; mjsa therefrom, therewith

na, ni not

nakha—Skt. Unguis odoratus

nacula—Skt. nicula—Barringtonia acutangula

naciphaka—subduing

najsammam unidentified ; perhaps for najsasama—showing

namva—nimva—salt

narama—naranda—to go out, to prolapse

narri—Skt nari—woman

nariya—scrotal enlargement, hernia

narva—(niruta—) burst

nastausaa—translates Skt sosa—pulmonary consumption

nasa—part, portion

nahttamalakaramja—Skt. (nakta—) Pongamia glabra

nagakesara—Skt. (—ke—) filaments of Mesua ferrea ; nagapuspa
—flower of the same

namma—name, by name

nalaviram Skt. nadvirana—fistula

nasta downwards

nasa—nata—to take

nittraupalambua—Skt netropalambuka—name of a fat

nimiysa—track, way ; nva nimiysa, naimesa vi in the direction
of, in the proper way

nimba—Skt. Azadirachta Indica, cf cimga ;—pattra—leaf of the
same

nrysuna—to flow out, to be discharged ; to menstruate,—namma—
discharge

nasa—,ni—nectar

niseama—to soothe ; nisimaka—soother, soothing

nihalja—, niheja—to beat down, to remove

- nilaa—Skt.—ka—Indigofera tinctoria, indigo
 nilotpala—Skt. Nelumbium speciosum, blue lotus
 no nine
 nauka—fine, soft
 nasa—reduced, low
 nī—curds ; —vutca—curdwater, a brew of curds
 nva after, following, in accordance with
 navava—, nva—slow, feeble, gentle
 nvia—deep, deep—seated
 nvista—‘burst down’, a kind of grahani, dysentery
 paa—foot
 pakvahaka—probably Skt. pakvatisara...chronic diarrhoea
 paksahaka—adapted from Skt. paksaghata—paralysis of one side,
 hemiplegia
 pacada—manner, variety
 pajvamna—that should be covered
 pamcagavya—Skt. the five products of the cow
 pamcapala—Skt. name of a fat
 pamcamula—Skt. the set of five roots, s. dasamula ; ysaysinaa—p.
 the set of roots of five grasses, enumerated 52 a 2
 pamcasuttra—Skt. consisting of five sutras
 pajsamada—honoured
 pamjsa five ; —suttra—Skt. panc sutra .the five-sutra
 pamjsasa fifty
 patala...patara—Skt. patala...first stage of cataract
 pataula—Skt. Trichosanthes Dioica
 pada formerly, before ; p. bisaa—belonging to formerly, above—
 mentioned
 pati, pa before, in
 padamja—nature, proper state

padajsa—padiya—to ignite, to burn

padana—receptacle, jar

padamsa—(padausa—) to swell, padamsamma—swelling

padia—way, manner, kind

padima—padanda—to build, to produce

padua—to perfume, fumigate, padvana—that should be fumigated; padvamma—fumigation

padausta—Skt. Pradusta—defiled, disordered, cf pradausa—

padmakyeysara—Skt —kesara—filaments of *Nelumbium speciosum*

pana—every, each

panasa—panasta—to disappear to lose

panayamma—adapted from Skt. pratinaha—suppression (of secretion of ear-wax)

panudamjsia—belonging to every day

papala—Skt pippali—*Piper longum*, —mula—its root

papimsa in the evening, cf. pisa

paphanaka—a refreshing, soothing medicine

pamakya—measure

payisa—Skt. payasya—*Gynandropsis pentaphylla*

paysana—Cheek, jaw

parapelave—Skt. paripelava—*Cyperus rotundus*

pariysma—urine

parvalaa—Skt paripalaka—guardian spirit

pasa—pasata—to let loose, to throw

paskausa—constipation of urine

pasina—coming from a goat

pasu/ausa—to be obstructed

paskyasta backwards, afterwards

pastarga—stiff, rigid

- paha—cooked, ripe
 pahijamma—warding off
 pahimsa—intermittent
 pahai/imsaka—remover, healer
 pahisa—pahiya—to disappear
 pahvetta—translates sosa—drying up of the body, emaciation
 pachaa—that should be cooked
 patca, pa afterwards, again
 patala—Skt. *Stereospermum suaveolens*
 pata—Skt patha—*Stephania henandofolia*
 pandaruga—Skt. *panduroga*—morbid pallor, chlorosis
 pama—Skt eczema
 para—feather
 parusa—Skt. *parusaka*—*Grevia asiatica*
 pasanabhedaka—Skt *Plectranthus scutellarioides*
 pandagratha—probably Skt *pindigrantha*—a knot of *Tabernaemontana coronaria* ?
 pijsa—pejsa—pajsa—strong
 pitta—Skt. bile, pittaa—belong to, due to bile
 pira—worm, insect; piramnaa—worm—containing
 pira—shoot, but
 piraura—pireda—to remove, to cure; piraureka—removing
 pisa in the evening
 pisaca...Skt. a kind of demon
 pisa/alyamna—that should be smeared, rubbed
 pisujamna—that should be cleaned

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